

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-10 (canceled).

~~1~~ Claim ~~11~~ (currently amended): A high-frequency semiconductor device comprising:

a ground plate extending over a semiconductor substrate throughout with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films, each of said interlayer insulation films being composed of a resin insulating material, and each of said line conductors forming a micro-strip line in conjunction with said ground plate, wherein said plurality of line conductors include one line conductor provided on the upper surface of the most upper one of said interlayer insulation films;

a plurality of pads arranged in series on said upper surface of said most upper one of said interlayer insulation films, adjacent to and along a periphery of said semiconductor substrate; and

a ~~plurality of grooves~~ ~~groove~~ provided in said most upper one of said interlayer insulation films, between each of said pads and said one line conductor on said upper surface of said most upper one of said interlayer insulation films, ~~[[and]]~~ each of said grooves being formed adjacent

to and surrounding a corresponding one of said pads ~~said pad~~,

wherein each of said grooves is formed to bend along a corresponding one of said pads.

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Claim 12/ (previously presented): A high-frequency semiconductor device as set forth in claim 11, wherein said ~~groove~~^{grooves} is partially disposed in a region between said pad and said one line conductor on said upper surface of the most upper one of said interlayer insulation films.

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Claim 13/ (previously presented): A high-frequency semiconductor device as set forth in claim 12, wherein said pad has an edge closely facing to the periphery of said semiconductor substrate, and wherein said ~~groove~~^{grooves} is formed in a region of said upper surface of said most upper one of said interlayer insulation films, except the region between said edge of said pad and said periphery of said semiconductor substrate.

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Claim 14/ (currently amended): A high-frequency semiconductor device ~~as set forth in claim 11~~ comprising:

a ground plate extending over a semiconductor substrate throughout with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films, each of said interlayer insulation films being composed of a resin insulating material, and each of said line conductors forming a micro-strip line in conjunction with said ground plate, wherein said plurality of line conductors

include one line conductor provided on the upper surface on the most upper one of said interlayer insulation films;

a pad provided on said upper surface of said most upper one of said interlayer insulation films; and

a groove provided in said most upper one of said interlayer insulation films, between said pad and said one line conductor on said upper surface of said most upper one of said interlayer insulation films, adjacent to and surrounding said pad,

wherein said groove is divided into a plurality of portions with at least one gap provided across said groove.

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Claim 15 (previously presented): A high-frequency semiconductor device as set forth in claim 14, wherein said one line conductor on said upper surface of said most upper one of said interlayer insulation films extends to pass through said gap and connects with said pad.

6
Claim 16 (previously presented): A high-frequency semiconductor device comprising:
a ground plate extending over a semiconductor substrate throughout with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films, each of said interlayer insulation films being composed of a resin insulating material, and each of said line conductors forming a micro-strip line in conjunction with said ground plate, wherein said plurality of line conductors

include one line conductor provided on the upper surface of the most upper one of said interlayer insulation films;

a plurality of pads arranged in series on said upper surface of said most upper one of said interlayer insulation films, adjacent to and along the periphery of said semiconductor substrate;
and

a groove having a ring shape, said groove being provided in said most upper one of said interlayer insulation films, inside the serial arrangement of said plurality of pads, between said pads and said one line conductor on said upper surface of said most upper one of said interlayer insulation films, and adjacent to said pads.

⁷
Claim ~~17~~ (previously presented): A high-frequency semiconductor device as set forth in claim 11, further comprising a through-hole provided in said most upper one of said interlayer insulation films, for connecting said pad on said upper surface of said most upper one of said interlayer insulation films to one said line conductor extending thereunder.

⁸
Claim ~~18~~ (previously presented): A high-frequency semiconductor device as set forth in claim 11, wherein said interlayer insulation film is composed of a polyamide or a benzocyclobutene.

⁹
Claim ~~19~~ (currently amended): A high-frequency semiconductor device having micro-strip lines, comprising:

a ground plate extending over a semiconductor substrate with an insulation film intervening therebetween;

a plurality of line conductors provided on said ground plate, forming a multiple layer structure with the intervention of interlayer insulation films including one provided between said ground plate and the lowest one of said line conductors, each of said interlayer insulation films being composed of a resin insulating material, said plurality of line conductors including one formed on the upper surface of the most upper one of said interlayer insulation films;

a plurality of pads arranged in series on said upper surface of said most upper one of said interlayer insulation films, adjacent to and along the periphery of said semiconductor substrate; and

a groove for preventing deformation caused in said most upper one of said interlayer insulation films by a force applied to said pad during a wire bonding process to propagate from the region under said pad to a region of said upper surface of said most upper one of said interlayer insulation films, on which one of said line conductors is formed, said groove being provided in said most upper one of said interlayer insulation films, and between each of said pads and one said line conductor on said upper surface of said most upper one of said interlayer insulation films.

¹⁰
Claim ~~20~~ (currently amended): A high-frequency semiconductor device as set forth in claim 16, further comprising a plurality of through-holes provided in said most upper one of said interlayer insulation films, for connecting said ~~[[pad]] pads on said upper~~

~~surface of said most upper one of said interlayer insulation films to [[one]] said line conductor~~
conductors extending thereunder.

¹¹
Claim ~~21~~ (previously presented): A high-frequency semiconductor device as set forth in claim 16, wherein said interlayer insulation film is composed of a polyamide or a benzocyclobutene.

¹²
Claim ~~22~~ (new): A high-frequency semiconductor device as set forth in claim 14, wherein said interlayer insulation film is composed of a polyimide or a benzocyclobutene.